

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-237143

(43)Date of publication of application : 08.09.1998

(51)Int.Cl.

C08F297/02

H01B 1/12

H01M 6/18

H01M 10/40

(21)Application number : 09-054100

(71)Applicant : SHIN ETSU CHEM CO LTD

(22)Date of filing : 21.02.1997

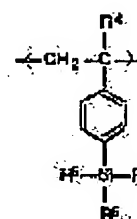
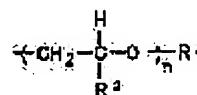
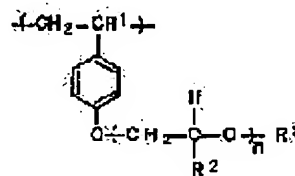
(72)Inventor : HIRAHARA KAZUHIRO  
NAKANISHI NOBORU  
ISONO YOSHINOBU  
TAKANO ATSUSHI

## (54) BLOCK-GRAFT COPOLYMER AND POLYMER SOLID ELECTROLYTE PRODUCED FROM THE SAME

## (57)Abstract:

PROBLEM TO BE SOLVED: To obtain a new block-graft copolymer useful as a material for a primary electric cell element and a secondary electric cell element, etc.

SOLUTION: This block-graft copolymer comprises a block chain A consisting of repeating units of formula I [R1 is H or methyl; R2 is H or methyl; R3 is an alkyl or an aryl; (n) is 1-100; the number average molecular weight of a graft chain of formula II in formula I is 45-4,400] and having  $\geq 10$  polymerization degree, and a block chain B of formula III (R4 is H or methyl; R5 to R7 are each methyl or ethyl) and the component ratio of the block chain A to the block chain B is (1:20) to (20:1). Further, the block-graft copolymer has  $\geq 210$  polymerization degree. The defect of the conventional block-graft copolymer can be improved by the block-graft copolymer having a trialkylsilyl group- containing styrene derivative as the block chain B introduced therein by the study about the composition of the block chain B.



## LEGAL STATUS

[Date of request for examination]

19.07.2000

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]